

REMARKS

Claims 1-20 are now pending in the application. The Examiner is respectfully requested to reconsider and withdraw the rejection(s) in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 102

Claims 1, 4, 5, 9, 11, 14, and 15 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Lee (U.S. Pat. No. 6,235,147). Applicant respectfully traverses this rejection.

Lee is directed generally towards a wet-etching facility for manufacturing semiconductor devices. Of interest, Lee teaches a plurality of horizontal slots 31a which are adapted to receive wafers as shown in Figure 3 (see, col. 4, lines 37 – 38). This structure allows the etchant solution to contact both the front and back sides of the wafer.

On the other hand, Applicant's invention is directed generally towards a wafer thinning technique. In particular, Claim 1 recites "a fixture having a plurality of horizontally orientated receptacles for loading the plurality of semiconductor wafers therein, wherein each of the receptacles provides a horizontal surface adapted to support at least one semiconductor wafer" in combination with the other elements recited in the claim. Thus, Applicant's claimed invention provides a structure that enables the removal a complete layer from one side of a semiconductor wafer, while not exposing the opposite side of the wafer to the etchant solution. Therefore, it is

respectfully submitted that Claim 1, along with the claims depending therefrom, defines patentable subject matter over Lee.

Additionally, independent Claim 11 also stands rejected by the Examiner. In this instance, Claim 11 has been amended to further define an improved etchant solution employed in by Applicant's wafer thinning technique. In particular, Claim 11 recites that "the etchant solution is comprised of a mixture of acetic acid, hydrogen bromide, potassium dichromate, and water, and the ratio of acetic acid to hydrogen bromide to potassium dichromate to water is about 4.5:1.5:132:1". As noted by the Examiner, Lee fails to teach the composition of the etchant solution. However, the Examiner also relies on U.S. Patent No. 6,187,515 (Tran) to teach this aspect of Applicant's invention.

Tran is directed generally to an optical integrated circuit microbench system. Of interest, Tran discloses an etchant solution with a ratio of acetic acid to hydrogen bromide to potassium dichromate to water of 100ml:300ml:66g:450ml. In other words, Tran does not disclose the particular composition of etchant solution as recited in Claim 11. Moreover, Applicant asserts that the recited composition is particularly suited to non-crystallographic and uniform etching, and thus non-obvious improvement over the etchant solution disclosed in Tran. Therefore, it is respectfully submitted that Claim 11, along with the claims depending therefrom, defines patentable subject matter over Lee, Tran or a combination thereof.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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